VBrick EtherneTV Portal Server

EtherneTV v4.4.3 Portal Server
Release Notes

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About VBrick Systems

Founded in 1997, VBrick Systems, an ISO 9001 certified vendor, is a privately held company that has enjoyed rapid growth by helping our customers successfully introduce mission critical video applications across their enterprise networks. Since our founding, VBrick has been setting the standard for quality, performance and innovation in the delivery of live and stored video over IP networks—LANs, WANs and the Internet. With thousands of video appliances installed world-wide, VBrick is the recognized leader in reliable, high-performance, easy-to-use networked video solutions.

VBrick is an active participant in the development of industry standards and continues to play an influential role in the Internet Streaming Media Alliance (ISMA), the MPEG Industry Forum, and Internet2. In 1998 VBrick invented and shipped the world's first MPEG Video Network Appliance designed to provide affordable DVD-quality video across the network. Since then, VBrick's video solutions have grown to include Video on Demand, Management, Security and Access Control, Scheduling, and Rich Media Integration. VBrick solutions are successfully supporting a broad variety of applications including distance learning and training, conferencing and remote office communications, security, process monitoring, traffic monitoring, business and news feeds to the desktop, webcasting, corporate communications, collaboration, command and control, and telemedicine. VBrick serves customers in education, government, healthcare, and financial services markets among others.

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These *Release Notes* have important information about v4.4.3 of the VBrick EtherneTV Portal Server. The ETV Portal Server is a video stream and source device management system accessed through Microsoft Internet Explorer 6.0 or higher (or Firefox 2.0 on a Mac) or through a VBrick EtherneTV-Set Top Box or IPR. More information can be found in the ETV Portal Server and IPR user documentation. The setup file installs the necessary ETV Portal Server components to a target ETV Portal Server machine. ETV Portal Server v4.4.3 requires the installation of a license file, normally supplied by e-mail or CD-ROM. *Note that the VEMS Portal Server will not operate correctly on a server that is configured as a primary domain controller.* **VBrick tests and supports the VEMS Portal Server on the platforms listed below.** These are the only supported platforms—VBrick does not test or support the Portal Server on any other platforms.

- Windows Server 2003 (Web Edition or Standard Edition)
- Windows Server 2008 (Web Edition or Enterprise Edition)

Note VBrick does not test or support ETV Portal Server on the Advanced, Enterprise, or Datacenter versions of Windows 2003 Server.

Topics in this document

What's New in 4.4.3

- Support for Windows Server 2008.
- New WM IPR hardware model (8000-0113-0002) backward-compatible with EtherneTV 4.0 or higher.
- The following automated upgrade options:

Automated Upgrade	Where Explained:
Portal Server v3.1/3.2/4.x to v4.4.3	Upgrading from Portal Server v3.1/3.2/4.x on page 6.
Windows Server 2003 to 2008	Upgrading from Windows Server 2003 to 2008 on page 8.

System Prerequisites

Windows 2003/2008 Server

- The Windows Server 2003 or Windows Server 2008 installation disks are required for the install.
- A minimum of 700 MB free disk space. Substantial additional disk space will likely be needed when ingesting or recording video.
- IIS Web Server and IIS FTP Server functionality must be enabled. The installer will determine if this needs to be installed.

Installing the Portal Server

If you ordered a Hardware/Software combination, the software will be pre-installed and your license will be activated on your server. The *Portal Server Admin Guide* will instruct you on how to configure the software. The *User Guide* will instruct you and your end users on how to access and view video from the Portal Server and how to schedule and view events with the Scheduler (if you purchased the Scheduler module).

For software only orders, it is strongly recommended that you read the *Release Notes*, which contain the installation instructions, and the *Admin Guide* prior to installing the software. The first step you should take is to Activate your software license. See the detailed instructions on the EtherneTV Product CD for more information. *Be aware that if you purchased a server-based "software-only" product from VBrick, you will need to install the software on a fully dedicated server.* There is no support or warranty coverage for Portal Server, VOD-W, or NVR software installed on a non -dedicated server. VBrick also recommends that you do not use anti-virus, spyware detection, or similar software.

Note **Windows Server 2003 or Windows Server 2008?** The installation steps for certain procedures vary slightly depending on whether you are using Windows Server 2003 or Windows Server 2008. For example, in Windows Server 2003 you use Control Panel > Add or Remove Programs for certain steps. In Windows Server 2008 you use Control Panel > Programs > Programs and Features. *This document explains how to perform installation steps if you are using Windows Server 2003.* If you are using Windows Server 2008, the steps will be slightly different.

When installing the Portal Server, the ETV Portal Server host name or IP address must match the host name or IP address of the computer on which it is installed. If the computer's host name or IP address is different, change these values in ETV Portal Server *after* you install the ETV Portal Server software. Go to **Add or Remove Programs > VBrick Media Control Server** and click **Change/Remove**. Then click **Modify ETV Portal Server Host Name or IP address** and modify these values as necessary. It is also good practice to check that the **Date & Time** and **Time Zone** are set accurately on the server. See "Synchronizing the Portal Server and the NVR" in the *Portal Server Admin Guide* for more information.

Note If you purchased a Network Video Recorder, see the *NVR Release Notes* for installation instructions.

Configuring Windows 2003 Server Standard Edition

The Portal Server runs on Windows Server 2003 Web Edition or on Windows Server 2003 Standard Edition. If you are using a server with Windows Server 2003 Standard Edition installed, you must modify the installation as explained below *before* installing the Portal Server. **If you are using Windows Server 2003 Web Edition or Windows Server 2008, ignore these steps and go to <u>Installing the Portal Server</u> on page 4.**

▼ To modify the Windows Server 2003 Standard Edition configuration

1. Install IIS (Internet Information Services).

    a. Go **Start > Control Panel > Add or Remove Programs**.

    b. Click on **Add/Remove Windows Components** in the left navigation panel of the window.

    c. Click on **Application Server** and select **Details**.

    d. Make sure the following subcomponents are selected:

      • Application Server Console
      • ASP.NET
      • Enable network COM+ access
      • Internet Information Services (IIS)

    e. Then select **Internet Information Services (IIS)** and click **Details**.

    f. Make sure the following subcomponents are selected:

      • Common Files
      • File Transfer Protocol (FTP) Service
      • Internet Information Services Manager
      • World Wide Web Service

    g. Then select **World Wide Web Service** and click **Details**.

    h. Make sure the following subcomponents are selected:

      • Active Server Pages
      • World Wide Web Service

2. If you install .NET 2.0 before installing IIS, the Network Service user is not added correctly to the .NET framework folder. Use these steps to verify or add the Network Service user:

    a. Go to C:\WINDOWS\Microsoft.NET\Framework.

    b. Right-click on the Framework folder, click **Properties**, and select the **Security** tab. If the Network Service user is present, exit the window and you are done.

    c. If the Network Service user is not present, click the **Add** button, type Network Service, and then **OK**.

    d. Give the Network Service user the following permissions and click **OK**:

      • Modify
      • Read & Execute
      • List folder Contents
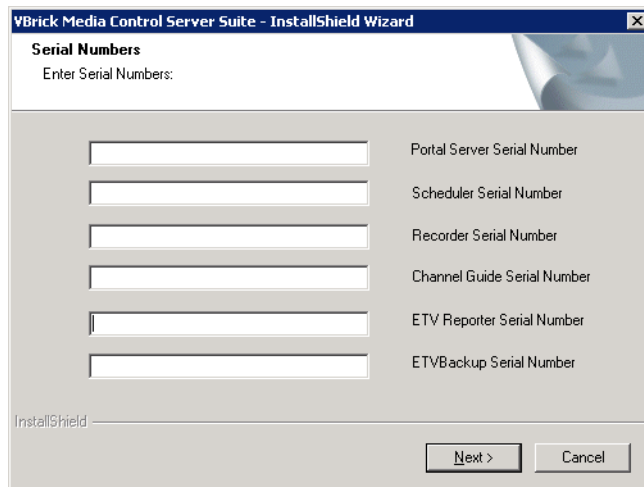   • Read and Write

3. When done, reboot the server.

Installing the Portal Server

The ETV Portal Server installation on Windows Server 2003 or Windows Server 2008 platforms is a two-step process. First you install the ETV Portal Server program files; then you configure the IIS web site. **This procedure assumes that Windows Server 2003 or Windows Server 2008 is already installed.** *The appropriate Windows Server installation disks are required for this install.*

▼ To install the Portal Server:

1. Note the server name or IP address where the ETV Portal Server server will be installed.

2. Go to the "Software" page on the EtherneTV Product CD, find and run the `Setup_VBrick_Media_Control_Server_Suite_4_x_x.exe`. The InstallShield Wizard will extract the files, start Portal Server Setup, and verify the necessary prerequisites are installed. (Note: You may be prompted to reboot after the prerequisites are installed. If so reboot the machine and then double-click on the installer again to continue the installation process.)

3. When the "Serial Numbers" page is displayed, use the "License Activation Keys & Serial Numbers" card that was included with the EtherneTV Product CD to enter serial numbers for each purchased component. Click **Next** when done.

VBrick Media Control Server Suite - InstallShield Wizard	
Serial Numbers	
Enter Serial Numbers:	
	Portal Server Serial Number
	Scheduler Serial Number
	Recorder Serial Number
	Channel Guide Serial Number
	ETV Reporter Serial Number
	ETVBackup Serial Number
InstallShield	Next > Cancel

4. <u>Windows Server 2003 only.</u> When prompted, be sure **IIS** and **MySql** are checked for installation and click **Next** to continue. (If you choose not to install these pre-requisites, the install will end.)

5. If prompted, insert the original **Windows 2003 Server** installation disk and click **Next**.

6. A Welcome page is displayed after the pre-requisites are installed. Click **Next** to continue.

7. Read the End-User License Agreement (EULA) and click **Yes** to continue.

8. A dialog box shows the default Portal Server directory path: `c:\program files\vbrick`. Select **Next** to continue or **Browse** to select a different path.

9. When prompted, navigate to the folder with your license (`.lic`) files. License files are obtained by using the "License Activation Keys & Serial Numbers" card included with the Product CD. The "Software License Activation" document, also included, explains how to activate your licenses using these keys. Note that multiple license files may be shown if you purchased optional EtherneTV components. *Select all available license files in the folder.* (For more about license files, see "Installing Serial Numbers and License Files" in the *Portal Server Admin Guide*.)

10. The Portal Server installation will then run to completion without additional input. This may take several minutes.

11. When the installation is complete, press **Finish** to exit setup. This completes the ETV Portal Server installation. The ETV Portal Server runs in the background and will auto-start if you re-boot the server machine. If you experience problems or need to start or stop ETV Portal Server for any reason, you can or stop ETV Portal Server as explained in Launching the Portal Server.

Note If you need to add or change a license file after initial installation, go to **Start > Control Panel > Add or Remove Programs > VBrick Media Control Server**. Then click **Change/Remove** and use the radio buttons to install or replace the required license.

Reinstalling the Portal Server

Use the following steps in the unlikely event that you need to reinstall the ETV Portal Server software.

▼ To re-install ETV Portal Server:

1. Uninstall the software. Go to **Start > Control Panel > Add or Remove Programs**.
2. Select **VBrick Media Control Server Suite** and click **Change/Remove**.
3. When prompted, be sure to *keep* the database.
4. When finished, restart the machine.
5. Reinstall ETV Portal Server (see Installing the Portal Server above). You *do not* need to re-configure the web site.
6. Restart the machine and you are done.

Launching the Portal Server

As noted, ETV Portal Server runs in the background and will auto-start if you re-boot the machine. If you experience problems or need to start or stop ETV Portal Server for any reason, you must start or stop the default web site. Note also that this is a web server installation that runs continuously. No desktop icons are present to show run status.

▼ To start or stop the ETV Portal Server Web Site

1. Go to **Administrative Tools > Internet Information Services (IIS) Manager > <server_name>**
2. Expand the tree under the **server_name** and click **Web Sites**.
3. Right-click **Default Web Site** and select **Start** or **Stop** as appropriate.

▼ To launch ETV Portal Server from the server host machine:

1. Open a web browser.
2. Enter `http://localhost` to launch the client application.
3. Enter `http://localhost/admin` to launch the admin application.

▼ To launch ETV Portal Server from a client machine:

1. Open a web browser.
2. Enter `http://<ip_addr|server_name>` to launch the *client* application where `<ip_addr|server_name>` is the IP address or server name of the ETV Portal Server. (If using Integrated Windows Authentication, use the server_name.)

3. Enter `http://<ip_addr|server_name>/admin>` to launch the *admin* application where `<ip_addr|server_name>` is the IP address or server name of the ETV Portal Server. (If using Integrated Windows Authentication, use the server_name.)

Uninstalling the Portal Server

Use the following procedure to uninstall the Portal Server for any reason. (Do not uninstall the Portal Server before performing an upgrade. See <u>Upgrading the Portal Server</u> on page 6.) **Before uninstalling the Portal Server be sure to take it off the network and reboot the machine.** If you fail to do so it may be necessary to reinstall the application and *then* uninstall again as explained below.

▼ To uninstall the Portal Server:

1. Go to **Start > Control Panel > Add or Remove Programs > VBrick Media Control Server Suite** and click **Change/Remove**.

2. When the following window is displayed, select **Uninstall Media Control Server Suite** and click **Next**.
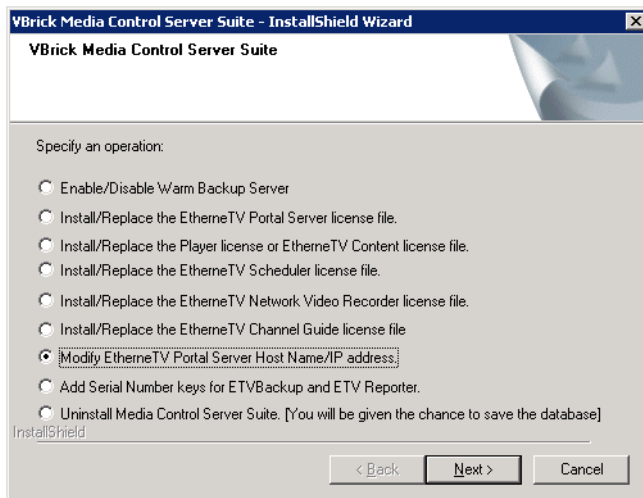
3. Respond appropriately when prompted to save the database.
4. After the uninstall, reboot the machine when prompted.

Upgrading the Portal Server

Upgrading from Portal Server v3.1/3.2/4.x

Version 4.4.3 supports upgrades from all 4.x versions. The upgrade from ETV Portal Server v.3.1/3.2/4.x to ETV Portal Server v4.4 is highly automated with little user interaction.

▼ To upgrade from ETV Portal Server v3.1/3.2/4.x:

1. Take the server off the network and reboot the machine first, before attempting the upgrade.

2. After the reboot run `Setup_VBrick_Media_Control_Server_Suite_4_4_0.exe` and click **OK** when prompted. The installer will run automatically and prompt for a reboot when done. Then select any license(s) when prompted.

Note After upgrading to v4.4.3, previously customized streams may display the message "Program Unavailable" in place of the program name (or stream name). This message means there is no *programming data* associated with the stream. *It does not mean the stream itself is unavailable*. You can still launch the stream in the preview window. The message "Sign Off" means a network TV Station (for example ABC or CNN) does not have programming scheduled in that time slot. During "Sign Off" time, local stations air their local content.

		1:00 PM	1:30 PM	2:00 PM
🐥	3	Program Unavailable		
🎨	5	Jakers! The Adventure...	It`s a Big Big World	SIGN OFF
🐥	7	Program Unavailable		
🎨	8	Passport to Europe Wi...	Passport to Europe Wi...	Amazing Vacation Homes

Post-Installation Steps – WM "Standard" Servers Only

Note These additional steps are required only if you are upgrading from v4.1 or lower. If you are upgrading from v.4.2 or higher, ignore this section.

If you have an existing WM *Standard* Server, an additional step is required to upgrade to v4.4 (this does not apply to WM *Advanced* servers). Several new fields have been added to the server description. After installing the upgrade, you must select the existing WM Standard Server name on **Global Settings > Servers** page and replace the default installation values for the following fields with values that are appropriate for your site. See "Adding WM Servers" in the *Portal Server Admin Guide* for more information about these fields.

Domain Name or Machine Name	When the ETV Portal Server and the VOD-WM server reside in the same domain, this is the name of that domain.
User Name	The name of a valid user that has administration privileges on the VOD-WM server or the network domain.
Password	The valid password of the user specified above.
Confirm Password	The valid password of the user specified above.

Upgrading from Portal Server v3.0

The upgrade from MCS v3.0 to ETV Portal Server v4.4 is a two-step process. First you install a patch file (`SetupMCSS_3_0_0_Patch.exe`) and then you run the v4.4 setup program (`Setup_VBrick_Media_Control_Server_Suite_4_4_0.exe`).

▼ To upgrade from MCS v3.0:

1. Before installing the upgrade, first take the server off the network and reboot the machine.
2. Run the patch file `SetupMCSS_3_0_0_Patch.exe`, follow the prompts, and reboot when done.
3. After the reboot run `Setup_VBrick_Media_Control_Server_Suite_4_2_1.exe` and follow the prompts. The installation is highly automated and requires little interaction.
4. Click **OK** when finished and the installer will prompt for a reboot.

5. Reboot the machine and you are done.

Upgrading from Windows Server 2003 to 2008

The v4.4.3 release has a "Cross-O/S Upgrade" option that lets you upgrade your server machine from Windows Server 2003 to Windows Server 2008. If you will <u>not</u> be upgrading to Windows Server 2008, skip this section and go to <u>Upgrading from Portal Server v3.1/3.2/4.x</u>.

▼ To upgrade the server machine from Windows Server 2003 to Windows Server 2008:

1. Prior to the upgrade, on the 2003 Portal Server, run the `SetupVBDatabaseExporter.exe` from the Product CD to install the VBDatabaseExporter program. A shortcut will be installed on the desktop called VBDatabaseExporter. Double-click on it to bring up the program. If you haven't changed the root password for MySQL simply press **Export** (otherwise enter the current password and press **Export**). This will create a file called `ExportedDB.sql` on the desktop. Save this file and any custom user data in the `VBrick\MCS` directory to a safe and convenient location.
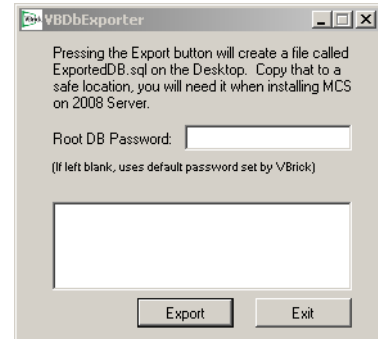
2. Custom user data can be found in the following directories:
   • D:\VBrick\Presentations\ or C:\Program Files\VBrick\MCS\Presentations if no D: drive is present on the system
   • D:\VBrick\MCSPresentations\ or C:\Program Files\VBrick\MCS\MCSPresentations if no D: drive is present on the system
   • C:\Program Files\VBrick\MCS\Logs\, or if the default directories are not used, the files located in the directory determined by MCS Admin Console > Global Settings > Access Logging > General Logging Properties > Log File Directory.
   • C:\Program Files\VBrick\MCS\nsc\
   • C:\Program Files\VBrick\MCS\sdp\
   • C:\Program Files\VBrick\MCS\StationIcons\
   • C:\Program Files\VBrick\MCS\Images\Thumbnails\

   Copy these folders into the same location you put the ExportedDB.sql file in Step 1. If you installed MCS in a non-default directory, change C:\Program Files to the appropriate directory in the file paths described in above in Step 2.

3. If you purchased our pre-packaged content, you will need to save the appropriate license files. Go to: C:\Program Files\VBrick\MCS\licenses\ and save the `contentlicense` folder. After you install MCS 4.4.3 you will need to take these license files and add them using the Portal Server "Install/Replace License Files" function. See the *Portal Server Admin Guide* for instructions on how to do this.

4. When done, wipe the drive and install Server 2008 (either Web or Standard edition).

5. When done, install the Portal Server. See <u>Installing the Portal Server</u> on page 2 for instructions. Near the beginning of the installation process, you will be asked if this is a Cross-OS upgrade. If **Yes**, a dialog box will let you browse to the `ExportedDB.sql` file you saved in Step 1 above.

6. Follow the prompts and reboot the server when prompted. If you saved any directories from your previous version of MCS you can now copy them back into the appropriate directories in MCS 4.4.3. The file locations will be the same as they were in your previous version of MCS unless you chose a different directory; if so the locations will be the same once you get to [INSTALLDIR]\MCS.

7. Reboot the server.

Macintosh Configuration

Configuring Safari

If you use Safari as your web browser on any Macintosh computer, it will block pop-up windows by default. This prevents the Portal Server from creating an external player and also prevents full-screen mode from functioning properly.

▼ To configure Safari for Portal Server operation:

1. From the **Safari** dropdown menu, deselect **Block Pop-Up Windows**:
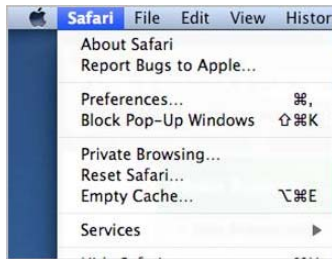
2. Then configure incoming connections as explained below. In order to view certain types of networked video streams, you must configure your Macintosh firewall to allow inbound UDP connections. This is configured differently depending on whether you are using Snow Leopard, Leopard, or Tiger.

Configuring Snow Leopard

If accessing the Portal Server from a Mac OS X Snow Leopard machine with Safari, no streams will play unless you change the default 64 bit mode to 32 bit.

▼ To change Safari to 32 bit mode:

1. On the Macintosh desktop, go to **Finder > Macintosh HD > Applications > Safari**.

2. Right-click on the **Safari** icon and select **Get Info**.

3. Check **Open in 32-bit mode** and close the window.

Configuring Leopard

▼ To configure Macintosh OS/X 10.5 (Leopard):

1. Go to **System Preferences > Security**, then select the **Firewall** tab. You will see a window that looks like this:
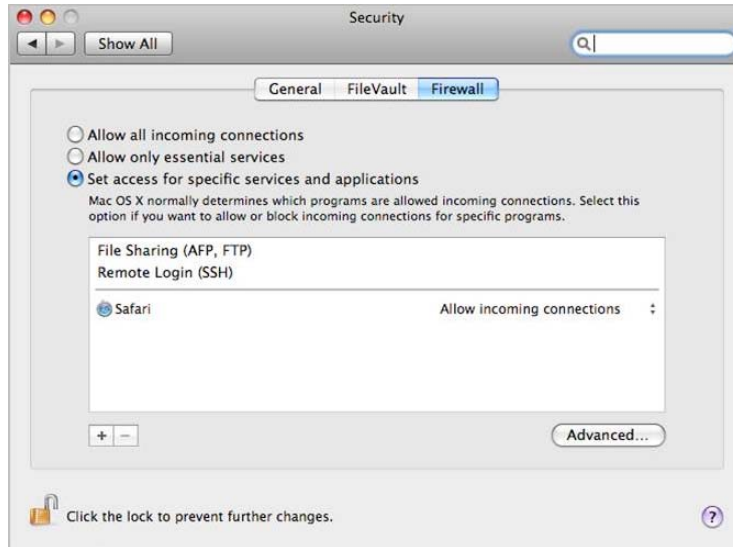
2. Set the Firewall either to **Allow all incoming connections** (not secure) or to **Set access for specific services and applications** (recommended). If you select the latter item, you must then click the **+** icon at the bottom of the window and add your web browser (Safari or Firefox) to the list. Note that the system will not work if you set the firewall to **Allow only essential services** because UDP packets will be blocked.

Configuring Tiger

▼ To configure Macintosh OS/X 10.4 (Tiger):

1. Go to **System Preferences > Sharing** and select the **Firewall** tab:

2. Then click the **Advanced** button and make sure that **Block UDP Traffic** is off as shown below.

Installing Macintosh Components

Depending on the **Specify Components to Download to Clients** setting on the Portal Server Global Assignments page, Macintosh users may be prompted to download VBrick player components the first time they launch a stream. These components must be installed to view all stream types (MPEG-1/2/4, Windows Media, H.264) and a separate download may be required for each.

▼   To download and install Macintosh components

1.   Click on the link to download the VBrick Macintosh video player plugin. This will display the following window.
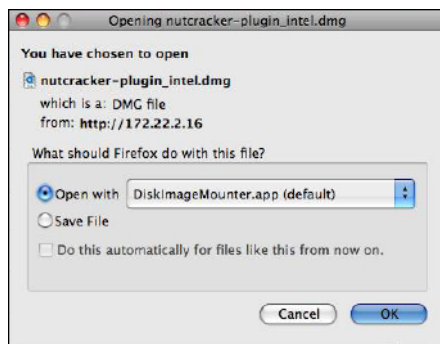
2.   Select **Open with** and click **OK** and double-click on the `nutcracker-plugin-x86.pkg` to install the plugin. Follow the prompts and accept the defaults.

3.   An administrator-level account is required to install the plugin. **Contact your system administrator and enter an appropriate administrator password when prompted.**

4.   When done, restart your computer to complete finish the installation.

5.   Verify the plugin is successfully installed.

    a.   Open a Portal Server client window and launch a video.

    b.   Ctrl-click on the video and select **About** from the popup menu. Verify that `Plugin 3.2.12` is installed.

VBrick

Cardinal Peak Nutcracker(tm) Plugin 3.2.12

Copyright (c) Cardinal Peak, LLC. 2003–2008. All rights reserved. Portions based on open-source code, including the libraries libmpeg2, libmad, libfaad2, mp4v2, and ffmpeg. Source code for these modules is available at www.cardinalpeak.com.

Build 090111-1716 from bents-fort.cardinalpeak.com, using libcornet 3.2.12.
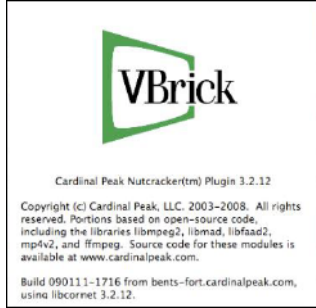
Upgrading Macintosh Components

If a Portal Server client machine has an older version of VBrick components installed, you must manually upgrade the player as explained below. **The Portal Server will not alert you that an update player plugin is available or required.**

Note If you do not upgrade the player on your Macintosh client machines to the latest version, older video content will continue to play as before but new features such as H.264 and Firefox 3 support will not be available.

▼   To upgrade an existing Portal Server client machine

1. Open the Portal Server in a web browser on the client machine requiring an update, launch a video, and check the *current* player version using the steps outlined above.

2. Ctrl-click on the video and select **About** from the popup menu. If the version number is less than 3.2.12 continue to the next step to perform an upgrade.

3. In the browser address bar, type the following URL:
   - Power PC Macs – **http(s)://<<Portal Server IP or Host Name>>/nutcracker-plugin.dmg**
   - Intel Macs – **http(s)://<<Portal Server IP or Host Name>>/nutcracker-plugin_intel.dmg**

4. When prompted, open the file, follow the prompts, and enter a password as explained above.

5. When done, restart your computer and verify the plugin is successfully installed as explained above.

Linux Configuration

Installing Linux Components

Linux desktops only. The Portal Server must download Linux components to *each Linux end-user desktop* before any streams will play. This should only be performed by a system administrator. When you access the Portal Server for the first time, you will see a message indicating that the appropriate plugins are not installed. The following procedure explains how to install the Linux MDS-xxx.rpm and the Nutcracker-plugin-xxx.rpm. You must have root permission to perform this install.

▼   To install Linux components on one end-user desktop:

1. Open the Portal Server user interface, click on **Download Components** in the embedded player area of the window, and copy the files to any folder.

2. Click on **Download Player** in the same area of the window and copy the files to the same location.
3. Type **rpm –i MDS-xxx.rpm** or double-click on the rpm package (it will prompt for the root password if you are not logged in as root.
4. Type **rpm –i nutcracker-plugin-xxx.rpm** or double-click on the rpm package (it will prompt for root password if you are not logged in as root.
5. For the plugin to load at startup, you must copy it to your local login home. For example:
   a. Open a New Terminal window and navigate to the folder where the browser is installed, for example **cd .mozilla** or **cd firefox**
   b. If it's a new user type **mkdir plugins**
   c. Type **cd .plugins**
   d. Type a symbolic link:
      ln –s usr/local/nutcracker/lib/libnutcracker-plugin.so .
      or **cp /usr/local/nutcracker/lib/libnutcracker-plugin.so .**

Upgrading Linux Components

Before you can upgrade a Linux desktop you must remove any existing Portal Server Linux components. Use the following procedure to uninstall existing Linux components from *each Linux end-user desktop* before you run the install procedure as explained above. The following procedure explains how to uninstall the Linux MDS-xxx.rpm and the Nutcracker-plugin-xxx.rpm. You must have root permission to perform this uninstall.

▼ To uninstall Linux components on one end-user desktop:

1. Reboot the Linux PC.
2. Open a New Terminal window and type the following commands:

   rpm –qa | grep nutcracker

   rpm –ef nutcracker-plugin-xxx

   rpm –qa | grep MDS

   rpm –ef MDS-xxx

   cd .mozilla\plugins

   rm libnutcracker-plugin.so

Security Policy and Recommendations

VBrick has fully tested the all of its server-based software products on Windows Server 2003 and Windows Server 2008 with all current Microsoft security updates installed. It is standard VBrick policy to configure and ship our servers with all current service packs and security updates as of the shipping date of the product. We also run limited regression tests when new service packs are released by Microsoft. Once VBrick software is installed at a customer site however, it becomes the customer's sole responsibility to install security updates and software patches as they become available. To protect against imminent threats, VBrick recommends you install and/or test all Microsoft security updates as soon as they become available.

Note To avoid impacting server operation or performance, VBrick recommends you set "Automatic Updates" to **Notify me but don't automatically download or install them**. This way you can install updates during off-peak hours without affecting viewers.

▼ To see what security (and other) updates are installed:

1. Go to **Start > Windows Update**.

2. In the right navigation pane, click **View update history** to display the history of all installed updates.

3. If necessary, go to **Start > Control Panel > Add or Remove Programs** to remove an unwanted update.

Microsoft IIS 6.0 Security

In addition to the standard security recommendations outlined above, there are additional Microsoft patches for IIS 6.0 you may wish to install.

• To hide the IIS internal IP address go to `http://support.microsoft.com/?id=834141`

• To remove the IIS "Server Information" banner go to `http://www.microsoft.com/technet/security/tools/urlscan.mspx`

• To remove the IIS "FTP Server" banner go to `http://support.microsoft.com/kb/q232068`

Caveats

This section addresses known issues, most of which have an easy workaround. For more information about any item, or help with an issue not listed here, contact your reseller or VBrick Support Services.

• When modifying a scheduled, private Conference (between MPEG-4 appliances only) to run again at a later date, you may get an `Invalid IP Address` error on the **Advanced Settings** page. To work around this error, select a different Destination in Advanced Settings, and then select Destination 1 again.

• QuickTime 7.6 only – To play H.264 streams, you must set Direct3D video acceleration to off in QuickTime Preferences. (This option is enabled by default.) Go to Edit > Preferences > QuickTime Preferences > Advanced > Video > DirectX and uncheck **Enable Direct3D video acceleration**.

• If **URL Password Protection** is enabled for a VOD-W server, the length of the VOD content URL (`rtsp://ServerIP/Folder and Filepath/Password Key`) may exceed the maximum character length (100 chars) and the video will not play. To work around this issue, you can reduce the number of characters in the VOD asset name.

• When recording H.264/MPEG-4 files there is a "hinting" phase at the end of the recording phase designed to reduce CPU overhead and preprocessing. In extreme cases, the hinting may take over an hour depending on number of recordings, bit rate, and duration. When the Portal Server "Status" page shows "Recording in progress" and 100% done, it means the recording is done but the hinting is still in progress. When the hinting completes, the file can be FTPed to the VOD servers.

• MPEG-4 and H.264 appliances only. If you change the appliance's management port (default = 80), and the appliance is <u>not</u> in the Portal Server database, the Portal Server will not discover and play *multicast* streams from these appliances. To workaround this issue, manually add the appliance(s) to the Portal Server database.

• Darwin VOD Servers – Some Darwin Open Source VOD Servers have a 2 GB limitation for H.264/MPEG-4 files. Video files greater than 2 GB from a Darwin server, may not

play on any player or platform. Check with the Darwin open source community (http://developer.apple.com/opensource/) for updates.

- There is a known issue with the number of H.264 streams an NVR server can presently record. NVR H.264 recording capacity depends on the length of the recording, the bandwidth used, and the extent to which the recordings end at the same time. For short time frames and low bit rates, the system provides the specified number of recordings. In extreme cases of long recordings at high bit rates (for example 2 hour, 4 MB streams ending at the same time), an NVR 10 and an NVR 40 may be limited to 2 streams and 3 streams respectively. This issues applies to H.264 streams only and a patch is currently under development.

- A file server using secure playback can be configured with an IP address or a host name. If the server certificate is issued for an IP address, you must use the IP address; if issued for a host name, you must use the host name. Otherwise, the video will not play and a message will indicate the security certificate was issued for a different website.

- On Windows PCs, you must have Apple QuickTime 7.5.5 installed to play MPEG-4 and H.264 streams with QuickTime.

- When scheduling a recording from an MPEG-4 encoder to an NXG VOD Server, using **Manual Entry** and **Program Name**, the ingestion will fail if closed captions are enabled on the encoder. To work around this issue, disable closed captions on the encoder.

- Standard VBrick Set Top Boxes do not support HTTP tunneling and will not play MPEG-4 content if the **HTTP Tunneling** option is selected in **Global Assignments**.

- The Portal Server Access Logger does not log the viewing of live or stored presentations created with VBPresenter.

- If two clients each try to record a stream at the same time, and the bandwidth required for both exceeds what is available on the VBrick (default = 20 mbps), the connection to the VBrick will be refused and one of the recording will fail with a message in the Status window. This is expected behavior.

- Macintosh (Safari) and Linux (Firefox) clients may not play live or stored video after a Portal Server upgrade. Clearing the browser cache will usually resolve this issue.

- Macintosh (Safari and Firefox) and Linux (Firefox). MPEG-4 content encoded using the 56K template will not display closed captions.

- Macintosh only (Safari 3.0 or higher). If Apple QuickTime is enabled in Global Settings as the default Macintosh Player for MPEG-4 Content, the QuickTime player will freeze the first time you click on any item. Click again to unfreeze and continue.

- Macintosh only. Safari 3.0 or higher. If Apple QuickTime is enabled in Global Settings as the default Macintosh Player for MPEG-4 Content, and the browser becomes unresponsive, click anywhere on the QuickTime player to recover.

- Macintosh only. When multiple external windows are enabled, recording is disabled and you can only record the stream shown in the preview window. In some cases the **Record** button may be displayed on external windows even though it is non-functional.

- NXG-1 VOD Servers only. Due to a limited staging area capacity, and depending on the number of streams being recorded and the size of the files, file transfers from an NVR to an NXG-1 may fail with the message: Failure writing to local file. This is known limitation of NXG-1 VOD servers.

- Web page errors can occur in Internet Explorer 7 when running the Admin console and the Scheduler on separate tabs in the same browser instance. For example, if you modify an Emergency Broadcast template on one tab and then try to modify a schedule on a different tab, Internet Explorer will report a web page error.

- When creating playlists, the popup Javascript window that lets you set Start and End times will not function unless the Portal Server has been added to the list of trusted websites. Go to **Tools > Internet Options > Security** and add the Portal Server host name or IP address to the list of **Trusted sites**.

- Firefox only. When viewing a playlist in an external player window, the external window does not stay on top when the clip changes. To change this behavior, Go to **Tools > Options > Content**. Click the **Advanced** button to the right of the **Enable JavaScript** checkbox, then check **Raise or lower windows**.

- Firefox only. When playing a stored WM stream on a Windows 2000 machine, the Pause control will black out the player window when you pause and then play. Do not use Pause. This is a known issue with no workaround.

- Windows Vista only. Live streams and stored streams will not work properly in fullscreen mode if you have the **Color scheme** set to **Windows Aero**. If this Vista option is selected, go to **Appearance and Personalization** and select a different color scheme.

- The Portal Server supports Flash (.swf) streams on Windows-compatible machines only. When adding URLs to live and stored Flash files, set the Type to WM and these files will play in the Portal Server. Flash URLs are not currently supported on Mac or Linux machines.

- When recording from a WM encoder to a Network Video Recorder (NVR) 40 machine, and using the **Best Quality** template, the NVR's maximum recording capacity is reduced to approximately 10 streams. Other WM templates are not affected.

- When scheduling a recording from a WM Appliance, RTSP and HTTP streams are both displayed in the Scheduler as RTSP.

- When recording a stream from the WM IPR in Portal Server mode, a rectangular red box is displayed in the lower-right area of the window to show that a recording is in progress. If you never leave the page, you can stop the recording by simply pressing the **Record** again. If you leave the page however (e.g. if you choose **MENU** and select another option), you must reselect the stream (and *then* press **Record**) to stop the recording and close the box.

- When using dual NICs on any Windows VOD server, communication between the NICs may fail if there is no path in the routing table from one NIC to the default gateway. To work around this issue, add a path to the default gateway as explained in the Windows Server documentation.

- If installing the Portal Server "Software Only" VBrick product on a machine with Windows 2003 Server Standard Edition, a "404 Page Not Found" may be displayed when you try to launch the Portal Server. To resolve this issue, you must add the Network Service permission to the Microsoft .NET directory as follows:

  1. Go to `C:\WINDOWS\Microsoft.NET\Framework`.
  2. Right-click on `v2.0.50727`, then select **Security** and press the **Add** button.
  3. Press the **Advanced** button, press **Find Now**, and scroll to the **Network Service** user.
  4. Click on the **Network Service** user and press **OK**. Then click **OK** again and **Apply**.

- If the **Receive Address Mode** of an MPEG-2 decoder is configured for **Program Name**, and the Portal Server is scheduled to stream to this VBrick, the video will not play as scheduled. There is no workaround. This is a known bug and was fixed in VBDNA v4.2 firmware.

- QuickTime (using Firefox or Safari) does not support Fast Forward or Rewind when playing a stored MPEG-4 stream. The FF and RW buttons on the QuickTime player simply pause the stream.

- When ingesting content to a VOD-W Server, all content titles must begin with a forward slash (/) and apostrophes are not allowed.
- When scheduling a live or a stored broadcast from a VBrick appliance that has multiple bit rate (MBR) enabled, the scheduled broadcast will use the VBrick's configured bit rate regardless of the template setting in the Scheduler. In this scenario, the Scheduler may generate error messages similar to the following on both the Portal Server's **Diagnostics** page and the VBrick's **System Log**. These messages can be safely ignored and the schedule will execute properly.

  Failed to Set<vbrickSlot1EncoderNetwork TransmitEnable=1>
  Slot1EncoderTemplateApplySet set to applySet failed

- When creating a stored broadcast schedule, the schedule will fail to create if the schedule **Start** date and **End** date are different (for example if it starts on one day and ends on the next). The end date and time in the schedule are adjusted to the duration of the stored file (except for Windows Media or Darwin files) but **Create Schedule** returns an error message. To work around this issue, simply click **Modify** and then click **Finish**.
- When you schedule a multicast of stored MPEG-1 content files from an NXG VOD server, you will only see set top boxes as destination devices. MPEG-1 decoders cannot play these streams from an NXG server and consequently are not shown as available destination devices. Non-NXG servers, however, do not have this issue. All decoders and set top boxes are available as destination devices for non-NXG servers.
- When playing a stored video on the external player, if you upload an image for a thumbnail, and then switch streams while the **Update Image** panel is still open, any subsequent thumbnail you upload will be applied to the first stream for which you originally uploaded a thumbnail.
- When using a Macintosh with Safari, you cannot always launch a stored stream from the Scheduler page by clicking on the TV icon. To work around this issue, launch the stream from the **Live Broadcasts** page instead.
- Macintosh only. The mute button is not "sticky" and works for the selected (live or stored) stream only . If you select a different stream, it will not be muted.
- Windows Server 2003 only. The Portal Server typically runs behind a firewall and is installed by default with Windows Firewall set to **Off**. If necessary, you can use the following steps to configure the Portal Server to run with Windows Firewall set to **On**.

  1. Go to **Start > Settings > Control Panel > Windows Firewall**. Check that the Firewall is **On** and **Don't allow exceptions** is <u>not</u> checked.
  2. To allow client access to the web server, go to **Exceptions > Add Port** and add Port 80 (TCP) to the Exceptions list.
  3. To enable FTP, go to **Exceptions > Add Port** and add Port 21 (TCP) to the Exceptions list.
  4. To enable live streams, go to **Exceptions > Add Program** and navigate to
     C:\Program Files\Common Files\VBrick\VBSapSrv
  5. To enable recording, go to **Exceptions > Add Program** and navigate to
     C:\Program Files\VBrick\Asr\VBASR.exe
  6. To enable thumbnails, go to **Exceptions > Add Program** and navigate to
     C:\Program Files\VBrick\MCS\ThumbNailCreator.exe

- Depending on the order in which they were originally installed, video streams may not run in the embedded player after you uninstall Internet Explorer ActiveX controls or Firefox plugins. To work around this issue in Internet Explorer, go to **Start > Control Panel > Internet Options > Settings > View Objects** and remove the following objects (if

present) with Internet Explorer closed: CVBUI, CFtpClientMgr Object, VBrick Streamplayer Components, VBrick MPEG4 Components. Then go to MCS and re-install them when prompted. To work around this issue in Firefox, simply download and install the browser from Mozilla.

- When switching between streams and/or switching between the integrated player and an external player, the embedded Windows Media Player will sometimes lose its ability to go fullscreen. This is a documented Microsoft problem with a patch available from: http://support.microsoft.com/?kbid=912452&SD=tech

- If a Set Top Box will not play live MPEG-4 multicasts in **MCS** mode, verify that the VBrick SAP **Format** is **ISMA Compliant** and that **Session Information** has been configured. In IWS go to **Configuration: Encoder > Announce (SAP)** to configure these parameters.

- With Windows 2003 Server (Web or Standard Edition with Service Pack 2 and Automatic Updates selected), warning messages can be generated by the Data Execution Prevention (DEP) software. To workaround these messages go to **Start > Control Panel > System > Advanced >** (Performance) **Settings > Data Execution Prevention** and add the flagged VBrick module as an exception.

- If you are FTPing non-English file names in IIS (for example when using the Portal Server SDK), there may be issues with Unicode support. If file names are not correctly displayed, go to **Control Panel > Regional and Language Options > Languages** and select **Install Files for East Asian Languages**. After rebooting go to **Control Panel > Regional and Language Options > Advanced** and select a language in the **Language for non-Unicode programs** control box. After a reboot the file names will display in the selected language on the FTP site using a command prompt window (on a Windows XP machine) or the Internet Explorer browser.

- MPEG-1 encoder/decoder appliances with main board assembly numbers below 6100-0010-0114 and MPEG-1 decoder only appliances with main board assembly numbers below 6100-0010-1214 do not support closed captions. If these appliances are scheduled as decoders with **Closed Captioning** either **Enabled** or **Disabled** (and not to **As Configured**), the stream will not play and `<invalid parameter>` messages may be displayed in the Admin Console **Diagnostics** page.

- When creating a Live Emergency Broadcast template from a WM appliance, if you set **Advanced Settings > Schedule Start Options > HTTP Push** to **Enabled** the existing Encoder Server settings will be used. Therefore, you also need to configure the WM appliance for the push. In IWS, go to go to **Configuration: Encoder > Server** and configure the Server Name or IP Address and Publishing/Mount Point. See "Creating Publishing Points" in the *WM Appliance Admin Guide* for more information.

- If you configure an MPEG-4 appliance with Audio and Video disabled and Closed Captions *enabled* (in extremely low bandwidth applications, for example), you must have **CC ON** set in the embedded Portal Server player or no stream (from any appliance) will play. If this happens, set closed captions to **On**, then close the browser and restart.

- When configuring the Portal Server to use LDAP database for access control, be aware that an LDAP user for **Auto Ingest via XML** is not supported. You must create and select a VBrick user in **Global Assignments** or the Event Viewer will display: `Failed to update ingestion status: Input string was not in correct format.`

- On Portal Server v3.2 or higher, an autoingest folder is not created until you record a program for the first time. If you want to autoingest before a recording, you must manually create the autoingest folder at `d:\inetput\ftproot\mcs\autoingest`. If you don't have a `d:` drive, use `c:\inetpub\ftproot\mcs\autoingest`.

- The VOD W server supports streaming of MPEG-4 closed captions; the NXG server does not. This means that if you have access to two servers (a VOD W and an NXG), and you perform a pushbutton recording of an MPEG-4 stream with closed captions, the closed captions track is stripped from the recording.

- Depending on user requirements, VOD users can be restricted to viewing RTSP streams at a specified bandwidth in Kbps. This feature is not currently supported for Darwin and VOD-WM video-on-demand servers.

- In some cases, because of a naming resolution issue, a LAN Network Video Recorder (NVR) does not record when the ETV Portal Server server is in a DMZ. As shown on the status page, the recording will either fail or run indefinitely (without actually recording). To work around this issue, modify (or create) a `hosts` file on the ETV Portal Server as shown below. Go to `c:\windows\system32\drivers\etc\hosts`. Open the `hosts` file in an editor and add the IP address and computer name of the NVR as shown below. (If the `hosts` file is not present, you must create one by saving a `txt` file with no extension.)

```
# Copyright (c) 1993-1999 Microsoft Corp.
# This is a sample HOSTS file addresses to host names. Each
# entry should be kept on an individual line. The IP address should
# be placed in the first column followed by the corresponding host name.
# The IP address and the host name should be separated by at least one
# space. Additionally, comments (such as these) may be inserted on
# individual lines or following the machine name denoted by a '#' symbol.
# For example:
# 102.54.94.97     rhino.acme.com # source server
# 38.25.63.10      x.acme.com     # x client host

127.0.0.1         localhost
nvr ip address    nvr computer name
```

- The duration of Darwin and WM video assets is not extracted in this release. As a result, the duration of a stored broadcast *schedule* for a Darwin or WM asset will not be automatically adjusted to the actual length of the clip. This means that the video asset plays until file end but the multicast continues until the end of the scheduled time.

- Multicast streaming from the VOD-D (Darwin) server is not supported.

- To avoid problems when recording content, the Windows Firewall must be set to **Off**. Go to **Start > All Programs > Windows Firewall** to turn it off.

- Use care when configuring virus scanning software. To avoid problems when recording on the ETV Portal Server, do not scan any folders into which recorded files are being saved. This is typically: `D:\Inetpub\ftproot\MCS\Record`.

- When creating an Emergency Broadcast template for a live broadcast and *manually selecting* **MPEG-4** and **Program Name**, the destinations available page shows only VBricks—it does not show IPRs. Manual entry of Program Name does not apply to IPRs.

- If an ingestion fails after a record and you wish to use the auto-ingest feature, be sure to purge the failed ingestion on the Status page before attempting the auto-ingestion.

- The ETV Portal Server and the Network Video Recorder (NVR) must be in the same time zone. Also, in order to record successfully, the system time on ETV Portal server and the NVR must be synchronized. You can synchronize the machines, for example, by running the Service for Windows Time on both machines.

- When scheduling a broadcast of MPEG-4 content from an InfoValue server to a VBrick decoder, v3.3 or higher software must be installed on the VBrick or the video will not play. Also the MPEG-4 file must be "hinted" or it will not play properly on the VBrick

decoder. Hinted files contain reorganized data that facilitates streaming, fast forward, rewind, etc.

- When IIS installs the FTP service, a default FTP directory is created at `drive:\Inetpub\ftproot`. In MSC 4.2 or higher the **Record Path** must be in the FTP path of the Record server, for example: `C:\Inetpub\ftproot\MCS\Record`. To set **Record Path** in ETV Portal Server, go to **Global Settings > Recorders > Modify Recorders > Record Path**.

- You cannot create or upload thumbnails for Live Video streams that were added using the ETV Portal Server **Global Settings > URLs** functionality. Any attempt to create thumbnails for these URLs will fail.

- VOD Polling interval requires a restart before changes take effect. On Admin page, go to **Global Settings > Global Assignments > Assign VOD Polling Interval**. If you change the value, you must restart Vbrick Object Starter Service on the ETV Portal Server for this parameter to take effect.

- With an NXG server, you can manually ingest video files to the server as documented. However you *cannot* use the **Add Video** command from the client application to add these same files. This feature is not available with Omnibase servers. Contact VBrick Support Services for more information.

- There is an issue with Admin settings for **Allow Access to Specific VOD Content** and **Allow Content Publishing**. If you check a parent directory, the sub-directories are also checked to indicate that the user has access to all sub-directories. However, at present there is no way to keep the user from unchecking a subdirectory. Regardless whether the user unchecks a sub-directory whose parent directory is checked, ETV Portal Server will still allow access to the sub-directory.

- There is an issue ingesting MPEG-4 content when closed captioning is enabled. Depending on the version of NXG software on the server, the ingestion may either fail or not playback. VBrick provides a utility to remove the closed captions track from an MPEG4 file if necessary. It is installed with ETV Portal Server in `c:\program files\vbrick\utils`. See the *ETV Portal Server Admin Guide* for details.

- The installer now changes the default root password for the MySQL database from no password to `vbrick_18`.

- For Macintosh when using IE, clicking on the scrollbar might cause a stream/video to play. Use the arrows to avoid this when viewing the playlist.

- For one-click login, if you type in the IP Address, rather than the name of the machine, you will be prompted for a username/password box. This is intended behavior as IE sees the IP Address and believes the user is in the Internet Zone. If you click on **Remember my password** you will not see the box again.

- The default FTP path in IIS is automatically set via the installer, but, depending on the particular machine's configuration, it may need to be changed. The installer sets the default FTP path to `d:\inetpub\ftproot` in IIS, if a D: drive is detected. Otherwise it sets the path to `c:\inetpub\ftproot`. If you have a machine with an E: drive and you want to set the FTP path to E:, you need to do the following: Go to IIS and use the right mouse button to select on the Default FTP Site, select **Properties** from the popup menu. The Default FTP Site Properties dialog box will appear. Select the **Home Directory** tab. In the **Local Path** edit box, change the value to `e:\inetpub\ftproot` and hit **OK**.

- If a user has defined a default IPR channel, and then removes that particular customized channel in the **Customize Streams** page, that default IPR channel is still listed as the current channel, even though it no longer exists.